ABSTRACT OF THE DISCLOSURE

Light that is incident through a pair of object lenses of digital binocular glasses is photographed by a pair of image pickup devices to obtain a pair of images (stereoscopic image) generating a difference corresponding to a parallax of both eyes. A geometric difference between image structures corresponding to a parallax of both eyes is recognized in the pair of images subjected to various corrections and stored in memories. Thereafter, a noise reduction process is performed, which reduces a difference (for example, a difference between random noises superposed on the pair of images by the image pickup devices) other than the recognized geometric difference between the image structures. The images subjected to the noise reduction process are displayed on a pair of display devices, and are visually recognized (stereoscopically viewed) by the user through eyepiece lenses.